

Customer No.: 31561
Application No.: 10/711,863
Docket No.: 14098-US-PA

To the Claims:

Claim 1 (previously presented) A method of forming conductive column in a fabrication of a circuit board, the circuit board comprising a dielectric layer formed thereon, the method comprising:

forming a first blind hole in a first surface of the dielectric layer;

forming a second blind hole in a second surface of the dielectric layer opposite to the first surface, a blind end of the first blind hole connecting to a blind end of the second blind hole, the first blind hole and the second blind hole constituting a through hole, wherein an inner diameter of the through hole near the first surface or the second surface is substantially larger than an inner diameter of the through hole near a middle portion of the through hole; and

filling a conductive material in the through hole, wherein the conductive material fills with the through hole from a position where the blind ends of the first and second blind holes connect with each other and extends towards two ends of the through hole to form a conductive column.

Claim 2 (original) The method of forming conductive column of claim 1, wherein the first blind hole and the second blind hole have a cone shape, and the through hole and the conductive column have an hourglass shape.

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Claim 3 (original) The method of forming conductive column of claim 1, wherein the circuit board further comprises a first conductive layer disposed over the first surface of the dielectric layer, and after forming the first blind hole in the dielectric layer, the first blind hole is passed through the first conductive layer.

Claim 4 (original) The method of forming conductive column of claim 3, wherein the circuit board further comprises a second conductive layer disposed over the second surface of the dielectric layer, and after forming the second blind hole in the dielectric layer, the second blind hole is passed through the second conductive layer.

Claim 5 (original) The method of forming conductive column of claim 1, wherein the first blind hole is formed by a mechanical drilling method.

Claim 6 (original) The method of forming conductive column of claim 5, wherein the second blind hole is formed by a mechanical drilling method.

Claim 7 (original) The method of forming conductive column of claim 1, wherein the first blind hole is formed by a laser drilling method.

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Claim 8 (original) The method of forming conductive column of claim 7, wherein the second blind hole is formed by a laser drilling method.

Claim 9 (original) The method of forming conductive column of claim 1, wherein the step of filling the conductive material comprises plating process.

Claims 10-15 (canceled)

Claim 16 (previously presented) The method of forming conductive column of claim 1, wherein the conductive column is a solid column full of the through hole.

Claims 17-18 (canceled).